

1 CLAIMS

10/502017

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1. A rotator for jib-carried tools, for example tree working units, wherein the rotator (10) is hydraulically driven and includes a stator (20) and a rotor (30), and wherein said rotator (10) is connected to a tip (2) of the jib or arm (3) via a link arrangement and to said tool (1), characterised in that the rotator (10) or its surroundings includes means (70,71) for determining the relative position of rotation between rotor (30) and stator (20) making it possible to limit the rotation of the rotor (30) and to enable a high degree of automatisation.
2. A rotator according to Claim 1, characterised in that the means for determining the relative position of rotation include a pulse emitter (70) and a number of pulse generating elements (71), such as grooves or teeth for instance.
3. A rotator according to Claim 2, characterised in that the rotor (30) carries the pulse emitter (70) and that the stator (20) carries the pulse generating elements (71).
4. A rotator according to Claim 2, characterised in that the stator (20) carries the pulse emitter (70) and that the rotor (30) carries the pulse generating elements (71).
5. A rotator according to any one of Claims 1-4, characterised in that the supply (5) of pressure medium to the rotator is effected through the medium of connection points in the stator (20).
6. A rotator according to any one of Claims 1-5, characterised in that the supply of pressure medium to the tool (1) is effected through the medium of a swivel coupling (40) and through the medium of channels (41,42) in the rotor (30).
7. A rotator according to any one of Claims 1-5, characterised in that the supply of pressure medium to the tool (1) is effected

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through the medium of at least one transit hole extending longitudinally through the rotor (30).

6. A rotator according to any one of Claims 1-7, characterised in
5 that the supply of electric power and/or the supply of signals to
the tool is effected through the medium of at least one transit
hole (45) extending longitudinally through the rotor (30).

9. A method pertaining to a rotator for jib-carried tools, for
10 example tree working units, wherein the rotator (10) is
hydraulically driven and includes a stator (20) and a rotor (30),
and wherein said rotator (10) is connected to a tip (2) of the jib
or arm (3) via a link arrangement and to said tool (1),
characterised by determining the relative position of rotation
15 between rotor (30) and stator (20) with the aid of rotational
position indicating means (70,71), limiting the angle through
which the rotator (10) rotates in either direction from a starting
position in order to limit the extent to which pressure medium
connection hoses present are able to twist and/or to limit the
20 extent to which connection cables (7) for signals, data
transmission, electric power supply, or the like, are able to
twist and to enable a high degree of automatisation.

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CLAIMS

1. A rotator for jib-carried tools, for example tree working units, wherein the rotator (10) includes a stator (20) and a rotor (30), and wherein said rotator (10) is connected to a tip (2) of the jib or arm (3) and to said tool (1), **characterised** in that the rotator (10) or its surroundings includes means (70,71) for determining the relative position of rotation between rotor (30) and stator (20).

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2. A rotator according to Claim 1, **characterised** in that the means for determining the relative position of rotation include a pulse emitter (70) and a number of pulse generating elements (71), such as grooves or teeth for instance.

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3. A rotator according to Claim 2, **characterised** in that the rotor (30) carries the pulse emitter (70) and that the stator (20) carries the pulse generating elements (71).

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4. A rotator according to Claim 2, **characterised** in that the stator (20) carries the pulse emitter (70) and that the rotor (30) carries the pulse generating elements (71).

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5. A rotator according to any one of Claims 1-4, **characterised** in that the supply (5) of pressure medium to the rotator is effected through the medium of connection points in the stator (20).

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6. A rotator according to any one of Claims 1-5, **characterised** in that the supply of pressure medium to the tool (1) is effected through the medium of a swivel coupling (40) and through the medium of channels (41,42) in the rotor (30).

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7. A rotator according to any one of Claims 1-5, **characterised** in that the supply of pressure medium to the tool (1) is effected through the medium of at least one transit hole extending longitudinally through the rotor (30).

8. A rotator according to any one of Claims 1-7, **characterised** in that the supply of electric power and/or the supply of signals to the tool is effected through the medium of at least one transit hole (45) extending longitudinally through the rotor (30).

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9. A method pertaining to a rotator for jib-carried tools, for example tree working units, wherein the rotator (10) includes a stator (20) and a rotor (30), and wherein the rotator (10) is connected to a tip (2) of said jib (3) and to the tool (1), **characterised** by determining the relative position of rotation between rotor (30) and stator (20) with the aid of rotational position indicating means (70, 71).

10. A method according to Claim 9, **characterised** by limiting the angle through which the rotator (10) rotates in either direction from a starting position, in order to limit the extent to which pressure medium connection hoses present are able to twist and/or to limit the extent to which connection cables (7) for signals, data transmission, electric power supply, or the like, are able to twist.

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